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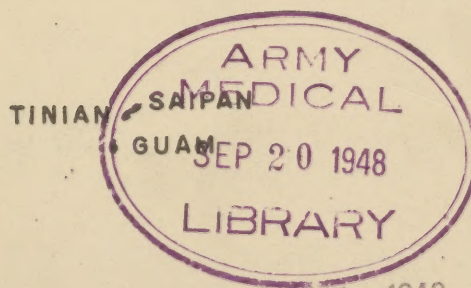
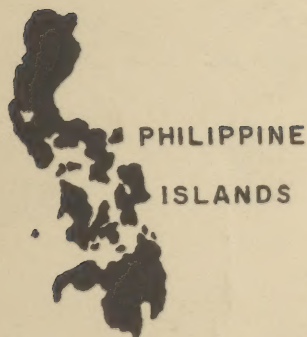
SURGEON'S CIRCULAR LETTER



1 SEP 1948

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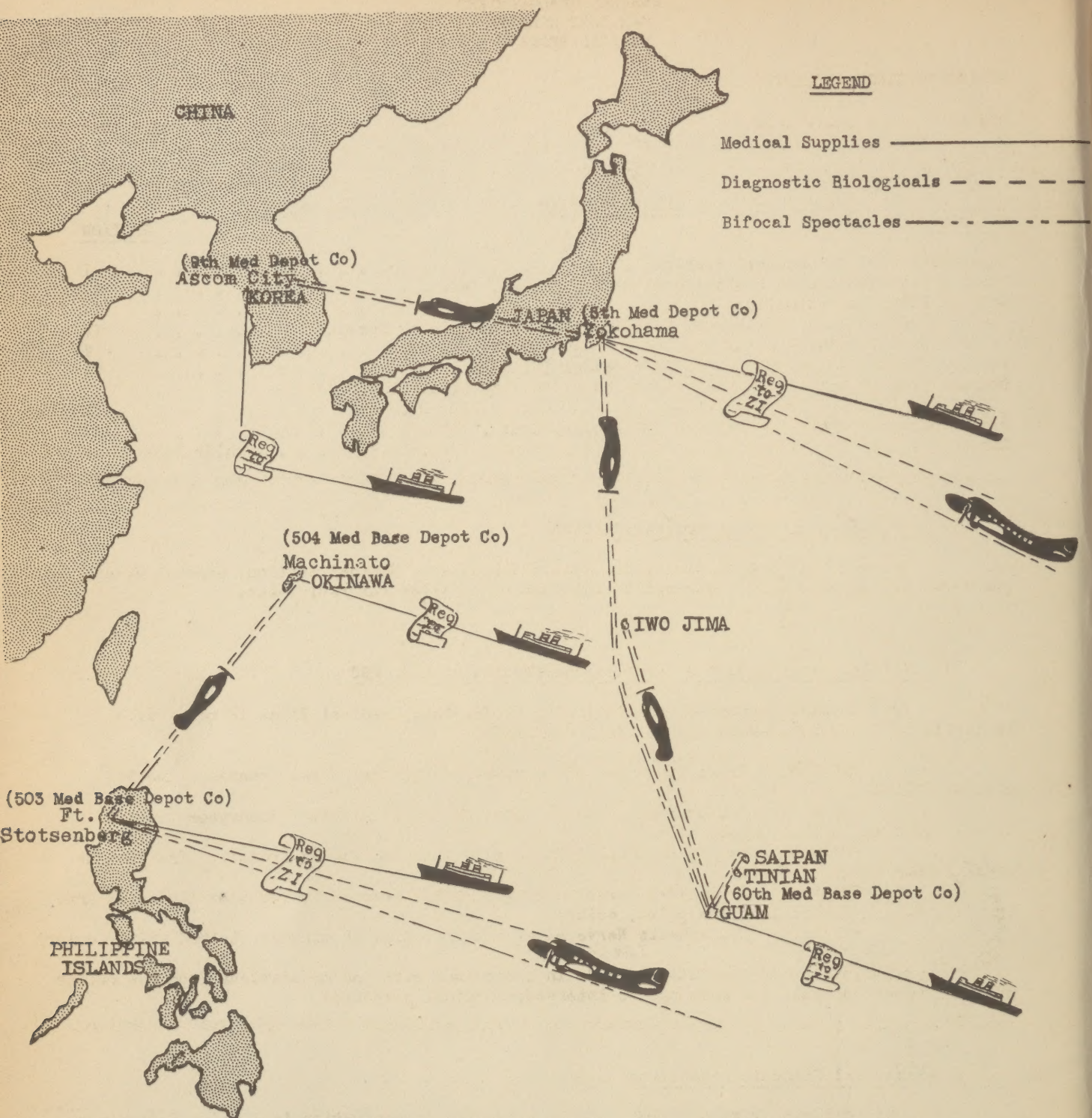


OCT 5 1948

MED SEC GHQ FEC

—RESTRICTED—

LOGISTICAL ROUTES FOR MEDICAL SUPPLY, FAR EAST COMMAND



The following major commands submit requisitions direct to the San Francisco Port of Embarkation for medical supply requirements: EIGHTH ARMY; UNITED STATES ARMY FORCES IN KOREA; PHILIPPINES COMMAND; MARIANAS-BONINS COMMAND; and RYUKYUS COMMAND. Laboratory diagnostic biologicals and bifocal spectacles are an exception and are handled as follows: Eighth Army furnishes these two items to Korea and Marbo; Philcom provides them for Rycom. Eighth Army and Philcom obtain laboratory diagnostic biologicals from the Army Medical Center in Washington, D.C., and obtain bifocal spectacles from the Base Optical Shop of the Saint Louis Medical Depot and to some extent by local procurement. The above chart shows laboratory diagnostic biologicals and bifocal spectacles being airshipped, whereas ordinary medical supplies are shipped by water transportation. In emergencies and for certain medical supplies such as small pox and Japanese "B" encephalitis vaccines, air shipment is made from the zone of interior.

GENERAL HEADQUARTERS
FAR EAST COMMAND
MEDICAL SECTION

SURGEON'S CIRCULAR LETTER

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NUMBER9

1 SEPTEMBER 1948

PART IADMINISTRATIVESUBJECTSECTION

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I. Organization of the Medical Section

Colonel Thomas C. Daniels, DC, Dental Consultant, Medical Section, General Headquarters, Far East Command, returned to the zone of interior for retirement.

II. Initial Distribution of Professional Medical Films, FEC

Initial distribution of the following professional medical films is being made available to installations in the Far East Command:

- PMF 5081 - Transplantation & Anastomosis of Radial Nerve (running time 9 minutes, 3-16mm print, color)
- PMF 5084 - "Aneurysms," Pt. II, Repair of False Arterial Aneurysms (running time 11 minutes, 3-16mm print, color)
- PMF 5086 - Repair to Skull Defects with Tantalum Plates (running time 13 minutes, 3-16mm print, color)
- PMF 5088 - Peripheral Nerve Surgery - Pt VII Peroneal Nerve Anastomosis at Knee (running time 7 minutes, 3-16mm print, color)
- PMF 5090 - Sympathetic Nerve Block (running time 15 minutes, 3-16mm print, color)

Distribution of the films is made in accordance with recommendations from the Office of The Surgeon General, for showings to interested medical personnel.

III. Medical Films in Production

The following list of film projects presently in production is published for information and guidance, and may serve as a basis for future requisitions upon the film libraries:

<u>PROJECT NUMBER</u>	<u>TITLE</u>
10146	Our Food and Our Health
10193	Control of Mosquito-Borne Diseases
10196	The Stowaway, Part I - Disease and Personal Hygiene

<u>PROJECT NUMBER</u>	<u>TITLE</u>
10208	The Stowaway, Part II - Galley Sanitation
10209	The Stowaway, Part III - Food Storage, Preparation and Serving
18046	Shades of Gray (NP)
18049	Therapeutic Exercise (Physiology)
18057	Medical Effects of Atomic Radiation
18058	Dynamic Physical Reconditioning
18071	Pinta
18072	Physical Medicine Service
18076	Lumbar Sympathectomy (Ganglionectomy)
18077	Inside the Cell
18078	Peripheral Nerve Surgery, Part II - Femoral Nerve Anastomosis
18079	Peripheral Nerve Surgery, Part IV - Radial Nerve Injury in Midarm
18080	Peripheral Nerve Surgery, Part V - Neurolysis of Peroneal Nerve
18081	Peripheral Nerve Surgery, Part III - Transplantation and Anastomosis of Radial Nerve
18082	Quadruple Ligation and Excision of Arteriovenous Fistula of the Femoral Vessels, Lower Third
18083	False Traumatic Aneurysm of the Radial Artery
18084	Repair of False Arterial Aneurysm
18085	Debridement of Compound Depressed Fracture of Right Temporal Region
18086	Repair of Skull Defects with Tantalum Plates
18087	Peripheral Nerve Surgery, Part VI - Neurolysis of Ulnar: Neurolysis of Median in Arm
18088	Peripheral Nerve Surgery, Part VII - Peroneal Nerve Anastomosis at Knee
18089	Peripheral Nerve Surgery, Part VIII - Clinical Manifestations of Paralysis
18090	Sympathetic Nerve Block
18091	Ulnar Nerve Suture at the Wrist
18092	Arteriovenous Fistula with False Sac Lower Femoral Vessels (Quadruple Ligation and Excision)
18093	Arteriovenous Fistula (Posterior Tibial Vessels) Exposure by Resection of the Fibula (Quadruple Ligation and Excision)
	United States Army Veterinary Service, Part I, Veterinary Service with Animals

IV. Boston Surgeon Named Director of VA's Prosthetic and Sensory Services

Dr. Augustus Thorndike, a 1921 graduate of Harvard Medical School and a prominent Boston surgeon, has been appointed director of Veterans Administration Prosthetic and Sensory Aids Service.

During World War II, Dr. Thorndike was assigned to the Army Medical Corps, serving overseas with the 105th General Hospital and at various posts in the U.S. He developed, and was director of, the Army's reconditioning program for disabled soldiers, for which work he was awarded the Legion of Merit. He was released from active duty with the rank of colonel.

The Prosthetic and Sensory Aids Service, formerly the Prosthetic Appliance Service, is in charge of providing artificial limbs, eyes, hearing aids, orthopedic shoes and similar devices for disabled veterans. It also conducts extensive research for improving these appliances.

The service operates 15 plastic artificial eye laboratories throughout the country and supervises 29 brace shops for the making and repairing of braces and artificial limbs.

It operates what is probably the world's largest prosthetic device testing laboratory at the VA regional Office.

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V. 24-Hour Ward Nursing Routine

Despite serious shortages of Army Nurse Corps personnel, the nursing service in the Far East Command must continue to provide skilled graduate nurses for the technical care of the acutely ill patients. To accomplish this it must be determined what essential duties are to be performed by the graduate nurses in order to utilize their specialties to the maximum. Non-technical duties are to be assigned to the auxiliary assistants.

It is suggested that professional nurses keep a work-sheet for a period of 3 days itemizing their ward activities every 15 minutes. At the completion of the 3-day period, a job analysis study can be made by the Chief Nurse to enable her to efficiently delegate duties of the Head Nurse, Staff Nurse and auxiliary assistants. The work specification for 24-Hour Ward Routine (see pages 4 and 5) should be posted at all times.

The Time Schedule (refer to Surgeon's Circular Letter for August 1948, page 4) shows the census of patients on the ward, the names of all personnel caring for the patient both day and night with the number of hours worked by each for the 24-hour period.

A Study of the Time Schedule for each ward is a simple means to establish a standard of measurement for good nursing care. By it can be determined the number of hours of care each patient requires and how much time should be given to each patient by the various nursing groups to insure a high quality of nursing care. The number of hours of care for the patient is obtained by dividing the total hours of each group by the number of patients and adding the results of each calculation. The same method may be used to determine a monthly or yearly average for future requirements. The Chief Nurse will have accurate information in figures to support her recommendations as a result of studies of the Time Schedule.

By putting into effect the following proposed 24-Hour Ward Routine schedule, the duties and responsibilities of nursing personnel will be known at all times. More nursing care will be accomplished in less time, there will be no overlapping of assignments and the maximum performance of duty will be accomplished.

If nurses are assigned to patients on a ward basis, the acutely ill should be assembled in groups to save time, steps and the specialties of skilled nurses will be utilized to the best advantage.

Despite our shortage of graduate nurses, it is believed that by implementing the Work Sheet, Time Schedule and the following 24-Hour Ward Routine, a better quality of nursing care will be given to patients in Army hospitals.

24-HOUR WARD ROUTINE

0700 - 1500 (Morning tour)
(Time covered)

Time	Head Nurse	Staff Nurse	Aide
0650	Nurse on night duty gives night report regarding patients' condition & orders; ward activities; checks narcotics & thermometers; hands over keys. Time slips, diet slips. Time & assignment sheets - changes when necessary. Rounds, hospital regulations, requisitions & supplies. Check on assignments; supervise procedures; check charts & orders. Delegate authority. Rounds with Doctors; check patient care; orders; units. Carry supervisor's responsibilities in her absence	Assist Head Nurse; directs in her absence. Give patient care. Intake & output. Each nurse responsible for complete care of all patients until noon. Serve breakfast trays. Give baths, back care, oral hygiene, nails, hair. Complete charts. Temperature, pulse, respiration (TPR) of acutely ill only. Medications, treatments. Demonstrate techniques. Serve dinner trays and assist with feeding.	Take TPR, give baths; refill water pitchers. Serve breakfast trays & assist with feeding. Work with nurse assigned until noon. Baths, oral hygiene, hair, nails, back rubs, turning patient on routine. Assist convalescents into wheel chairs. Clean bedside tables; arrange flowers; wash & boil glasses, pitchers, basons. Give morning nourishment. Errands. TPR for 11 am. Dinner trays & assist with feeding. Remove trays.
1130	See Assignment Sheet for First and Second Lunch for All Personnel		
1300	Hear complaints and, where necessary, arrange for correction. List new orders. Responsible for quiet hour for patients. Evaluate performance of nursing personnel. Inventory. Help subordinates plan their work; solve problems. Rounds to see patients; check medications; orders; list special orders; instruct special procedures. Plan for following day for time, assignments, slips. Give morning nurse report to relief nurse preferably by individual patient's chart to save copying.	Medications. Special orders & treatments. Special assignments (see assignment sheet). Make out slips for discharge. Report complaints. Check orders & charts. Meet & direct visitors. Check intake & output. Results of care & patients' condition. Provide equipment for use. Special orders, problems, difficulties.	Give bedpans, straighten articles around patient; lower head of bed, shades; turn off radios, ventilate rooms; fresh water. Patients' rest hour. Make up vacant units. Prepare for visitors. TPR for 3 pm. Report to Head Nurse before reporting off duty.
1450	Morning Nurse Report with Evening Nurses - Rounds together when necessary		
1500	Arrange assignments; orders; requisitions.	Check narcotics; medications; treatments.	Help with new patients; complete special assignments.

1500 - 2300 (Evening tour)
(Time covered)

Visiting hours - meet visitors. Check night supplies; laboratory requests; check ward; check patients. Evening report.	Special orders, requisitions. Other nurses: Assist with visitors; complete special assignments; admissions; laboratory requests; TPR (seriously ill), report elevations; chart; check intake & output. Prepare patients for PM care. Medications. Serve supper trays	Complete vacated units. Answer lights. Prepare patients for PM care TPR for afternoon. Nourishments; prepare for supper.
Remove trays	Evening care Police Diet Kitchen, utility & linen rooms. Bedpans; tooth water.	TPR; nourishments; police kitchen. Evening care; specimen bottles; bedpans; prepare patients for night; answer lights. Replace equipment; returns for Central Supply. Report to Head Nurse before reporting off duty.
2300 - 0700 (Night tour) (Time covered)	First supper before reporting on duty	Check intake & output; get all specimen bottles; assist nurse; answer lights; fill water pitchers. Special assignments; assist with routine care of patients; check intake & output; police ward, utility and linen rooms; bedpans; early AM care; oral hygiene; urine specimens to laboratory. Report to Head Nurse before reporting off duty.
2400	Check patients hourly; equipment in use; charts & orders; medications & treatments; special orders; charting; night reports; report to supervisor; medications & treatments. TPR for 0400. Chart; make out replacement requisitions; prepare preoperative medications & treatments; check narcotics; begin 0600 medications; TPR for 0800; Complete charting the results of care & patients' condition, equipment in use, special orders, problems, difficulties.	Check patients hourly; equipment in use; charts & orders; medications & treatments; special orders; charting; night reports; report to supervisor; medications & treatments. TPR for 0400. Chart; make out replacement requisitions; prepare preoperative medications & treatments; check narcotics; begin 0600 medications; TPR for 0800; Complete charting the results of care & patients' condition, equipment in use, special orders, problems, difficulties.
0650	Night Nurse Report to Day Nurses (Preferably by individual chart to save recopying)	Night Nurse Report to Day Nurses (Preferably by individual chart to save recopying)

VI. Extract from Port Medical Supply Information Letter No. 597

Stock No. 5-362-500 Hydrocolloid, Alginate Type, 12s, manufactured by L. D. Caulk & Co. under the trade name "Zelex" prior to January 1946, has been determined to be unsuitable for Medical Department use. Depots and stations have been advised to dispose of through salvage proceedings stocks on hand of this particular type product, if manufactured prior to that time.

VII. Extract from Department of the Army Circular No. 189 (Medical Officers - Military Resident Program)

Department of the Army Circular 189, 24 June 1948, announces the graduate professional training available under the Military Resident Program as outlined in section IV, Circular 148, Department of the Army, 1948.

Training in the medical specialties which will commence 1 January 1949 and 1 July 1949 is outlined below. Subsequent training under this program will be announced at a later date.

Officer residency training - Residency training under this program is approved to meet the requirements of American Specialty Boards. This program is designed to provide residencies in each of the training levels to include assistant residents, residents, and senior residents within its sphere. Medical specialty training available for newly commissioned officers under this program is as follows:

(1) A limited number of senior residencies in thoracic surgery, orthopedics, pulmonary diseases, pathology, ophthalmology, and physical medicine.

(2) A limited number of residencies in orthopedics, pathology, and physical medicine.

(3) A limited number of assistant residencies in obstetrics, urology, thoracic surgery, dermatology, and pediatrics.

(4) A substantial number of assistant residencies in anesthesia, general surgery, orthopedics, internal medicine, psychiatry, pathology, ophthalmology, otolaryngology, radiology, physical medicine, and clinical physicians training.

(NOTE: Some of these assistant residencies in urology, general surgery, internal medicine, and radiology are available at the Gorgas Hospital, Canal Zone.)

Residency training will be conducted in the following approved Army Medical Department teaching hospitals:

<u>NAME AND LOCATION</u>	<u>TOTAL BEDS AVAILABLE</u>
Brooke General Hospital, San Antonio, Texas	1,862
Fitzsimons General Hospital, Denver, Colorado	2,595
Letterman General Hospital, San Francisco, Calif.	2,135
Oliver General Hospital, Augusta, Georgia	1,450
Walter Reed General Hospital, Washington, D.C.	2,050
Madigan General Hospital, Tacoma, Washington	1,729
Percy Jones General Hospital, Battle Creek, Mich.	2,519
Gorgas Hospital, Panama, Canal Zone	600

Applications will be submitted as outlined in Circular 148, Department of the Army, 1948, and must reach the Office of The Surgeon General by 1 October 1948 to receive consideration.

Selection of applicants will be as outlined in Circular 148, Department of the Army, 1948. Those officers who are not selected to enter residency training on the dates outlined

herein will, if qualified, be furnished a certificate indicating the date on which they will enter approved professional training.

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VIII. Recent Department of the Army and FEC Publications

- AR 350-1010, DA, 7 June 48. "Military Education" - "Professional Education and Training for Medical Department Officers".
- AR 145-10, C-10, DA, 9 June 48. "Reserve Officers Training Corps - Administration & Training" - Par 19 d "Immunization".
- AR 345-415, C-5, DA, 10 June 48. "Military Records" - "Daily Sick Reports".
- AR 605-20, DA, 11 June 48. "Commissioned Officers" - "Appointment in Medical, Dental, Veterinary, Medical Service, Army Nurse, and Women's Medical Specialist Corps, Regular Army".
- AR 40-25, C-1, DA, 16 June 48. "Medical Department Women's Medical Specialist Corps - General Provisions".
- CIR 175, AFL 160-159, DA & AF, 10 June 48. "Report of Treatment Furnished Pay Patients (BEC)".
- CIR 176, AFL 160-160, DAAF, 10 June 48. "Hospitalization in Army Hospitals of Personnel of other Federal Agencies".
- CIR 177, DA, 11 June 48. Sec IV, "T/A 8-100" (Deletion of Item No. 1-384-114, Prophylactic, Mechanical 144's)
- CIR 179, DA, 14 June 48. Sec I, "AR 40-590 - Administration of Hospitals - Changed"; Sec III, "San Francisco Medical Depot" - Change of Address; Sec IV, "Rescission" (T/O 8-400, 24 Mar 41).
- CIR 182, AFL 160-175, DAAF, 18 June 48. "Rates Applicable During Fiscal Year 1949 to Pay Patients Treated in Medical Facilities".
- CIR 184, DA, 18 June 48. Sec III, "Ration Saving Funds". Par 2 a pertaining to Hospital Messes.
- CIR 187, DA, 22 June 48. Sec V, "Tables of Organization and Tables of Organization and Equipment" - Certain Series T/O&E's Changed; Sec VI, "Rescission - Certain Circulars pertaining to ANC and WMSC".
- CIR 189, DA, 24 June 48. Sec I, "AR 145-30" - ROTC Training Camps - Pertaining to Physical Examinations; Sec IV, "Medical Officer" - Military Resident Program.
- CIR 188, AFL 39-10, DAAF, 24 June 48. "Enlistment of Women in the Women's Army Corps, Regular Army, and in the United States Air Force". Par 7, Sec III, "Physical Requirements".
- CIR 21, GHQ, SCAP, 26 June 48. "Control of Entry and Exit of Property and Cargo into and from Japan". Par 5 f pertaining to Food; par 9e(4) pertains to Narcotics.
- CIR 195, DA, 1 July 48. Sec I, "Albumin, Serum, Human, 25 GM., 100cc (Medical Item 1-582-010)", pertaining to expiration date.
- CIR 200, DA, 6 July 48. "AR 40-590" - Changed.
- G.O. 43, DA, 21 June 48. Sec IV, "Meritorious Unit Commendation" - 29th Med. Depot Company.
- G.O. 42, DA, 21 June 48. "Territorial Command Test, Third Army Area. Par 4 "The Surgeon General".
- G.O. 45, DA, 24 June 48. Sec I, "Army Area Medical Laboratories" - Designated.
- MEMO 40-505-4, AFL 160-55, DA & AF, 20 May 48. "Maternity Care of Women Discharged or Relieved from Active Duty".
- MEMO 40-590-5, AFL 160-158, DA & AF, 10 June 48. "Admission of Veterans Administration Beneficiaries to Army Hospitals".

- MEMO 40-590-15, AFL 160-155, DA&AF, 10 June 48. "Report of Treatment of Pay Patients (Reports Control Symbol MED-45)".
- MEMO 40-590-16, AFL 160-156, DA&AF, 10 June 48. "Admission and Treatment of Civilian Employees of Cost-Plus-A-Fixed-Fee Contractors of the Department of the Army and the Air Force in Medical Facilities of the Departments outside Continental United States".
- MEMO 40-590-17, AFL 160-157, DA&AF, 10 June 48. "Medical Care for Nationals of Foreign Governments in Medical Facilities of Departments of the Army and the Air Force".
- MEMO 40-590-18, AFL 160-165, DA&AF, 14 June 48. "Admission and Treatment of Members of National Guard and National Guard of the United States in Medical Facilities of Departments of the Army and the Air Force."
- MEMO 40-1705-1, AFL 160-170, DAAF, 15 June 48. "Supply of Spectacles to Oversea Commands".
- MEMO 600-750-34, AFL 35-38, DA&AF, 30 June 48. "Enlistment & Assignment of Partially Disabled Combat-Wounded Veterans of World War II" - Certain Parts pertaining to Medical Department.
- BUL 18, DAAF, 7 June 48. Sec VII, "Retirement Benefits - Army and Navy Nurse Corps".

PART II

TECHNICAL

<u>SUBJECT</u>	<u>SECTION</u>
Intravenous Injection of Mapharsen.	IX
Results of Heterophile Antibody Agglutinations and Kahn Tests in Patients with Viral Hepatitis	X
The Problem of Non-Specific Urethritis.	XI
Case Report - Schistosomiasis and Portal Cirrhosis.	XII
Some Developments in Military Medicine.	XIII

IX. Intravenous Injection of Mapharsen



It has been reported that difficulty is still occasionally experienced following the intravenous injection of mapharsen. The following is quoted from Moore's Modern Treatment of Syphilis:

"The Preparation and Administration of Mapharsen - This drug is to be given intravenously by syringe.

1. Inspect the ampule; read the label.
2. Select an ampule containing the proper dosage. Several doses may be prepared at the same time as standing and aeration do not increase toxicity. Place in a sterile container cool sterile freshly distilled water to the amount of 5-10 cc. for each dose. Add the drug to the water. It dissolves readily. Squirt the solution back and forth several times with a syringe to promote aeration (observe that this is the direct opposite of all the arsphenamines).
3. Aspirate the desired amount of solution and inject rapidly."

"Elaborate precautions on the part of the patient are unnecessary. If there is a tendency to constipation, a mild cathartic should be taken the night before treatment; this reduces the incidence of gastrointestinal reactions. It is wise, for the same reason, for the patient to avoid food for the 2-3 hours immediately preceding and for a few hours following the injection."

X. Results of Heterophile Antibody Agglutinations and Kahn Tests in Patients with Viral Hepatitis (abstract) - Havens, W. P. et al, Proc. of the Soc. for Exp. Biol. and Med. 67: 437(April 1948)



To continue to draw attention to the nonspecificity of serologic reactions in the diagnosis of syphilis, the following abstract is published:

"This brief report summarizes the results of Kahn tests in 388 known non-luetic patients with viral hepatitis. These patients were composed of experimentally infected healthy male volunteers and of hospital personnel who contracted acute hepatitis during the performance of duty. Of this group 6 (1.5%) developed positive Kahn tests and 10 others (2.5%) had doubtful tests. Of a larger group of 508 patients with viral hepatitis 16 developed heterophile antibodies with titers of 1:56."

XI. The Problem of Non-Specific Urethritis by H. E. McDonald, Maj., MC, 49th Medical General Hospital



Non-specific urethritis as a clinical entity gains importance in military personnel, not so much for the physical disability involved but for the mental distress to the patient when the question of V.D. is involved, and for the time lost by the patient in reporting repeatedly on Sick Call, not to mention the expense of large amounts of drugs used in resistant cases.

In making a survey such as this in military personnel the clinical followup following treatment is always a problem. It was felt that the followup in this condition was fairly reliable for several reasons. First, those who expected to go home in the near future, or who were awaiting the arrival of dependents, were quite concerned with their difficulty and voluntarily reported back to the clinic until cured to their usually quite critical satisfaction. Secondly, those with persistent discharges were either stopped at the Replacement Depot or were accosted at an early morning physical inspection and promptly returned to the clinic.

Of 143 cases presenting themselves to the G.U. Clinic with the complaint of urethral discharge and treated by six or seven different officers, 49 cases lent themselves to fairly complete analysis and form the basis of this paper. Excluded were those cases which were proven to be acute gonorrhea, those which were thought to be physiological, (this will be mentioned a little later) and those on whose-Out-Patient card a paucity of data appeared.

The material is divided into four main sections, namely: the history, the physical examination with pertinent findings looked for, the treatment given here in the clinic, and finally the followup as manifested by the duration of treatment until clearance was given. Not all of the cases received all the treatments to be mentioned, nor were all of the points to be mentioned noted on each case. It was, therefore, felt that a more accurate picture could be gained if the percentage were based on the number of observations of any particular finding and this has been done.

The history of contact or V.D. was the first point noted in the history. Recent contact or V.D. was taken as less than one month from the date of appearance in the clinic. Being a bit narrow-minded as to the mode of infection with the gonococcus it was considered that all those individuals who had gonorrhea, either remote or recent, had had contact. Consequently, 16% of the cases gave a history of recent contact while 21% had a remote contact. Sixteen percent had gonorrhea within one month and 32% longer than that, many being several years prior to the present complaint, and probably contributing in no way to it. Fifteen percent of the patients denied having contact or V.D.

Eighty-two percent of the individuals reported their symptoms to be as less than

six months' duration while the remaining 18% were longer than this -- some ranging up to several years, the discharge usually being noted intermittently in those cases.

Those individuals with and those without urinary symptoms were about equally divided in that 47% noted accompanying urinary symptoms usually manifest by frequency or dysuria, or both, while 53% had noted no accompanying urinary symptoms.

A morning discharge was predominant feature in this series in that 90% of the cases noted a discharge only before urinating in the morning. In the remaining 10% the discharge was noted through the day and frequently stained the man's clothing.

As to previous treatment 6% had only sulfa, 41% had only penicillin previously, 44% had both sulfa and penicillin and 9% had instillations usually consisting of argyrol. The sulfa administered was usually given in 5-day courses and frequently two or three such courses had been given. Penicillin was most commonly used and not infrequently up to a million units had been given in a course with very little or no effect on the patient's symptoms.

In the physical examination several points were stressed: First, examination of the genitals for evidence of lesions or expressible discharge; secondly, the two-glass urine test, and thirdly, examination of the prostate. Routine smears and cultures have been abandoned as a routine out-patient procedure; first, because of the burden placed upon the laboratory for a very minimum of useful information and, secondly, because the organisms usually recovered are those normally inhabiting the urinary tract, namely, non-hemolytic staph., strep., and dithereids. Smears are of course taken on all these cases which clinically appear to be gonococcal. All patients are instructed that should a profuse yellow discharge appear in the morning following treatment that a smear should be immediately taken. Most of the patients who appear bring along bona fide evidence that a number of smears ranging up to ten and not infrequently culture reports have been negative for the gonococcus. Bacteriological studies are, of course, indicated when complications such as cystitis or epididymitis appear or in long protracted cases, the latter we have not so far encountered. In this series 46% had a discharge expressible when seen, usually muco-purulent in character. In 54% no discharge was expressible.

With the two-glass test the first glass was clear in 90%, cloudy in 10%. Sixty-eight percent of these urines contained shreds. In the second glass 100% was clear while 12% revealed shreds.

In examination of the prostate the diagnosis of prostatitis is made on a wet smear taken following massage. If the smear shows a large number of WBC diffusely spread throughout the secretion or if clumps of WBC are seen a diagnosis of prostatitis is made. In this connection, it is important that the urethra be cleansed by having the patient void before the prostatic examination is made, the two-glass urine test usually accomplishing this feature. In this series the prostate was described as clinically of normal consistency in 71% of the cases and as being soft in 29%. The wet smear revealed normal secretion in 69% and evidence of prostatitis in 33%, a fairly close correlation with the clinical picture. The correlation with the two-glass test is very poor, however, and probably due to the fact that too much urine is voided in the first specimen.

Before discussing our regime of treatment it seems pertinent to discuss the mental conflicts which we have noted in these patients, as well as the physiological discharges since both are closely allied. One symptom pattern has been so constant that we have come to regard it as the "Going-Home" syndrome. In this the patient is about to report to the Replacement Depot for deportation home. Having been away from family guidance and teaching for a year or two the full impact of his former training and the vigorous anti-V.D. campaign to which he has been subjected becomes evident and he becomes greatly concerned as to whether or not he has contacted V.D. which will manifest itself when he returns home. The natural instinct is then followed and the patient begins a rigorous program at self-examination at opportune times, usually in the morning or following urination, the examination consisting in stripping the urethra. After a few days a small amount of discharge can be produced and the patient comes to the clinic. A similar guilt complex comes into play in those individuals expecting the arrival of dependent, a third type seen is the individual who has had no contact but who has a friend or someone bunking close to him in the barracks who is reported with a clinical case

of gonorrhea. Since all individuals have heard of rare cases of gonorrhea transmitted without intercourse, such a possibility becomes a greater probability as time elapses and especially with the production of a scant discharge. Certain other manifestations of conversion mechanisms have also been seen frequently. These include isolated inguinal pain, usually bilateral urethral itching or burning, and frequency. Urological studies fail to reveal any organic disease. The symptom is usually vague in nature, occurs singularly and is unassociated with any symptom complex of urinary-tract disease. In many of these cases a V.D. phobia or sense of guilt is elicited.

Several types of discharges which have been seen we feel are physiological in nature and are brought to the patient's attention by the above-mentioned mechanisms. One is a discharge occurring following bowel movements. Here a wet smear will show that the seminal vesicles have been emptied by a hard stool. Secondly, a small amount of clear mucoid material can usually be expressed from the glands of Littre which line the urethra. Thirdly, an individual who has been accustomed to having intercourse regularly and who suddenly stops can usually find on arising a drop of prostatic secretion which has accumulated in the urethra overnight. Fourthly, a poorly administered pro may produce a little discharge for a few days.

Hence, our first step in treating these individuals is attempting to elicit some history of V.D. phobia and to assure him that such an infection is not present, nor does he have an infection which may injure him in later life or is transmissible. In this respect a little extra time spent with this individual at his initial visit may save considerable time in subsequent visits since large amounts of penicillin and sulfa have helped fix the condition in his mind.

Secondly, the patient is instructed not to strip the urethra again until the morning of his next visit, usually one week later, and, thirdly, local measures carried out in the Out-Patient Clinic. In this series 62% received injections of 1/4% or 1/2% silver nitrate usually at weekly intervals. Injection being confined to the anterior urethra and being done with a small blunt-nose urethral syringe. Twenty percent of the individuals received anterior urethral irrigations of 1:9000 permanganate solution, usually daily or every other day. Most of these were hospital patients. Twenty-four percent received soundings using a large sound in rather resistant cases in the hope of breaking any small abscesses which may be present along the urethra and 26% received prostatic massages in conjunction with the above measures. Occasional meatotomy is done on individuals with a very small meatus. We have found in most cases that treatment at weekly intervals is sufficient, very occasionally twice a week, thus obviating the danger of "Over Treatment" which is the tendency, especially in hospitalized patients. Here we prefer to treat all such patients on a duty status, except those who have come long distances. They are then hospitalized.

In reviewing the results, I have tried to re-emphasize the psychiatric background of many of these cases by determining the number who required only one visit to the clinic. For this determination the hospital patients were excluded as they were obviously treated more than once. In this series 44% were either clinically cured or lost in less than one month and 5% in less than 3 months. None required longer than this. As to alcoholic beverages after the patient is clinically cured I permit him to return to any habits along this line to which he is accustomed. Cases with prostatitis are cautioned that an excessive amount of alcohol will usually bring about a recurrence of symptoms.

In this series there were 74% enlisted men, 17% officers, and 9% civilians. Whether this represents a ratio of the personnel in this area or whether some can be attributed to the V.D. program given the enlisted men I cannot say.

In conclusion I would like to re-emphasize the role played by the patient's concern in the production of chronic urethritis and to encourage the treatment of this in conjunction with mild local measure.

XIII. Case Report - Schistosomiasis and Portal Cirrhosis by Capt. Theodore B. Podkul,
MC, 10th General Hospital (PS), APO 1105



On 11 September 1947 a 62 year old male Filipino was seen in the Medical Clinic of the 10th General Hospital. He spoke no English and his son (Philippine Scout) gave the following history. For the past few years the patient has had persistent ankle and leg edema. Approximately one year ago an incomplete paralysis affected all four extremities. Gradually he regained motor control and the only residual is a weakness in the right arm and hand. He has frequent attacks of syncope which are not preceded or followed by any other symptoms. He has never had any cardiac pain or genito-urinary symptoms. The family history and previous medical history were vague and noncontributory. It was grossly evident that the patient was in need of hospitalization and the diagnosis of, "Congestive heart failure with ascites and dependent edema," was made primarily to satisfy the administrative requirement of having an admitting diagnosis.

On 12 September 1947 he was hospitalized and examined. The general appearance was that of a rather old, thin, yet not emaciated, male Filipino with a slightly protuberant abdomen and edematous extremities. He walked unassisted with a slow slapping gait and had no complaints requiring immediate attention. Skin, head, neck, thorax, anus and rectum, bones and nervous system were normal considering his 62 years. Lungs were clear to percussion and auscultation except for a few fine basal rales. Cardiac rhythm was regular, PMI was at the 5th ICS inside the MCL, no murmurs or enlargement noted. B.P. 110/66. The abdomen was distended 4 $\frac{1}{2}$ and percussion showed dullness in the flanks with tympany at the highest portion of the convexity, shifting with change in position. Peristalsis was normal. The spleen was questionably palpable and the liver nonpalpable. Superficial veins of the abdomen were engorged in the standing and recumbent positions. A 3 $\frac{1}{2}$ scrotal and penile edema were present. Prostate was fibrotic and atrophied. A 2 $\frac{1}{2}$ weakness of the right arm was the only abnormality in the muscular system. A marked contracture of the 5th finger, right hand, was the result of an old injury.

The initial urinalysis showed a specific gravity of 1.021, reaction acid, negative for albumin and sugar, and many calcium oxalate crystals upon microscopic examination. Serology was negative. RBC 2,530,000, WBC 4,3000, Hb 8.0 gms or 51% and a differential of neutrophils 62, lymphs 33, and eosinophiles 5. Liver function tests reported on the 5th hospital day were as follows: Icterus index 5, thymol turbidity 25, total prot. 6.0, albumin 3.4, A/Gratio 1.3, prothrombin time 6 minutes, sed. rate 32 mm/hr, and a hematocrit of 32%.

On the 6th hospital day a paracentesis yielded 4,500 cc of bloody ascitic fluid. Then he was given 500 cc of whole blood. Immediately after the transfusion the abdomen was examined and the solid organs were not palpable. The ascitic fluid was examined by the laboratory and they reported as follows: Spec. gr. 1.011, RBC 37,300 cu mm, WBC 500 cu mm, differential of polys 14%, lymphs 71%, basophiles 3%, eosinophiles 2%, monocytes 10%. The sediment from 500 cc of bloody fluid showed many red blood cells, lymphs and pink staining substance. A few squamous epithelial cells, some of which appeared bi-nucleated but no sheets of cells were seen nor any mitotic figures or anaplastic cells. Diagnosis was - no evidence of malignancy.

Within 24 hours, despite a limited intake and a salt free diet, the abdomen was noticeably refilling. On the 9th hospital day a second paracentesis yielded 4,000 cc of fluid which was less bloody. Ammonium chloride, 10 grains every four hours was given in preparation for mercupurin and after 5 days the acidification was discontinued and the mercupurin withheld. The reason for not giving the mercupurin was not stated. On the 12th hospital day the third paracentesis yielded 5,000 cc of a clear pink-yellow fluid. This and the previous sample of ascitic fluid were examined and nothing extraordinary reported. The ankle and leg edema receded to 1 $\frac{1}{2}$ and the scrotal edema was markedly absorbed. In the interim between paracenteses a hippuric acid test was done and the total benzoic acid output of the 4 specimens was 0.70 grams. The RBC increased to 3,660,000, Hb 9.4 grams or 60% and RBC morphology showed anisocytosis and poikilocytosis with the red cells definitely macrocytic. Sed. rate 45 mm/hr, and the urinalysis negative. A radiographic examination of the GI tract after the oral adminis-

tration of barium revealed a paradoxical motion of the right diaphragm which was indicative of a paralysis of the right phrenic nerve. The stomach was normal. A diverticulum in the 1st portion of the duodenum was described as being 4 cms in length, non-obstructed and draining freely. A density in the RUQ was interpreted as a gall-stone. The upper small bowel pattern was normal.

On the 18th hospital day the abdomen was again filling and the pedal edema persisted at 1+. Another transfusion of 500 cc of whole blood was given. The patient had no complaints beyond a mild full-feeling in the abdomen and loose stools averaging 4x daily. Stool specimens were positive for occult blood and hookworms. None of the suspected parasites or bacteria were reported. Particular attention was given to the possible presence of *E. histolytica*, *paratyphosenteriae*, and schistosomes. A sputum sample was negative for AFB. An EKG was interpreted as showing myocardial damage on the findings of QRS complexes low up lead CF4, CF5, initial R up deep S lead CF2 and an iso-electric T wave in lead 3. Auricular and ventricular rates of 96 per minute in sinus rhythm.

On the 20th hospital day the chest was examined by X-ray and revealed a decrease in the lung volume as compared to the film taken on admission. This was most probably due to a high diaphragm bilaterally, which in turn was due to a 3+ ascites. The cardiac shadow was not clearly seen, but it was estimated at 11.5 cms, whereas the hemithoracic transverse diameter was 13½ cms. No pulmonary parenchymal pathology or pleural fluid was seen. A fourth paracentesis-abdominis yielded 4,500 cc clear amber fluid. Following the procedure the abdomen was palpated for solid organs and masses. None were found. The following morning an IVP was done and kidney function was normal. Calices and ureters normal. Ascitic fluid was reforming at the rate of approximately 1 liter a day.

On the 25th hospital day 4,200 cc of clear amber fluid was removed by paracentesis. The patient was slipping rapidly despite being absolutely afebrile and asymptomatic. He ate roughly 1,200 calories daily and spent most of his 24 hours sleeping, for the most part in cat-naps. No oral or intravenous nourishment was given because he was living at a basal rate.

A medical consultation was held and the consensus was that cardiac and renal disease were not primarily responsible for this clinical picture. The diagnosis was hepatic cirrhosis with a complicating malignancy, primary site undetermined. In an effort to disclose the possible site a repeat GI series, barium enema, and a gall-bladder visualization were recommended. The patient's condition and prognosis were poor at this time so the tests were widely separated. While these tests were being performed (34th to 65th hospital days) the patient was given ammonium chloride 10 grains four times a day and 1 cc mercupurin intravenously twice a week. The usual 4 to 5 liters of fluid at weekly intervals dramatically reduced to 2 liters in 2 weeks. The small and infrequent samples from paracenteses were sent to the laboratory for examination. All samples were accompanied by requests for special search for TBC, malignancy cells, ameba, and schistosomes. Reports were negative.

The repeat upper GI oral barium studies revealed the same findings already described in the original studies, and in addition a marked spasticity of the ascending colon. The large bowel retrograde administration of barium showed prompt and complete filling except for a constant filling defect in the mid-portion of the descending colon. This was interpreted as a localized area of spasm probably inflammatory in origin. Evacuation was good and the air study outlined a considerable portion of the colon. The biliary tract after the oral administration of dye was conspicuous in that no evidence of the dye was seen in the gall-bladder. It was accordingly recorded as non-functioning. The localized density in previous films was not seen.

Throughout the time these studies were being conducted the regimen of paracenteses and mercupurin were maintained. The patient sat up for longer periods, walked unassisted to and from the latrine, ate more, slept less during the day, and maintained a mean weight of 100 lbs, but improvement was not enough to remove him from the Seriously Ill List. On a few occasions he had 3 or 4 consecutive, loose, bloodless stools. They were not sufficiently mucoid to be indicative of any of the dysenteries. Stool samples were negative for parasites, ova, ameba and pathogenic bacilli. During the few interviews with his son, who was the only one available who could converse with the patient in his particular dialect, nothing of any import was added to the history. He insisted that he was completely asymptomatic and refused to believe he was in need of hospitalization, but he did like the hospital conveniences.

From the 65th to the 72nd hospital days the clinical course was unfavorable. The response to ammonium chloride and mercupurin was diminishing rapidly. A relative anuria became manifest and was accompanied by an increased outpouring of extracellular fluid. Intake was limited, diet was salt-free, and acidification maintained, yet the extravasation continued. On the morning of the 72nd hospital day the patient was found with 4 $\frac{1}{2}$ ascites, grade 2 pedal edema, respiratory embarrassment and complaining of pain in the thorax. A paracentesis was performed immediately and 6,000 cc of homogenous bloody brown-red fluid was removed. The dyspnea was relieved by the paracentesis, but the pain in the lower thorax continued. Sedation was not necessary because the patient slowly became stuporous and analgesic. By the close of the day he was all but comatose. He could be aroused to consciousness, but the response was momentary. Pulse became thready and the blood pressure gradually fell to 60/0. IV plasma was started. Throughout the 73rd hospital day the patient was comatose and moaned with each expiration. Another unit of plasma was given. The eyes diverged, pupils dilated, he could not be aroused, and all voluntary motor activity was lost. In the morning of the 74th hospital day he expired without gaining consciousness.

Clinical diagnosis: Cirrhosis, hepatic with possible malignancy.

Abstract of Autopsy Protocol

The autopsy was performed at the 10th General Hospital four hours after the patient expired. Personnel from the 3rd Medical General Laboratory, Department of Pathology, performed the autopsy and composed the Autopsy Protocol from which this abstract was taken.

Grossly the body was found to be well developed, but poorly nourished. The abnormalities recorded were as follows: Slight dependent lividity, decreased skin turgor, bilateral arcus senilis, teeth dirty and in poor condition, abdomen slightly protuberant, a healing wound 0.5 cms in length and located 4 cms inferior to the umbilicus (paracentesis wound).

The body was opened with a "Y" incision. The peritoneal cavity contained 3,500 cc of a cloudy red fluid. The pericardial sac had 30 cc of a clear yellow fluid. The pleural spaces had no free fluid. Both parietal and visceral peritoneal surfaces were flecked with reddish-gray masses of fibrin. Fresh fibrinous adhesions, easily broken through with the finger, bound the organs in the upper 1/3 of the abdomen to each other. At the autopsy table each organ was examined and samples were taken for histopathologic examination. Gross pathologic diagnosis for each organ was negative except for the right lower lung, which showed congestion and edema, and the liver. The liver was so conspicuously abnormal that the pathologist's description is quoted verbatim.

"The weight of the liver is 1,000 grams. It is shrunken and firm. The surface is rough, being composed of many small grayish-white, irregular nodules, varying in size from 0.5 - 0.2 cm in diameter. The tissue cuts with marked increased resistance. The cut surface is markedly firm and shows mottled areas of yellow, and grayish-white. In the diaphragmatic surface of the left lobe, there is found a bluish-black fluctuant mass which measures 7 cms in diameter. On section into this area, there is found a mass 8 cms in diameter, the surface of which is soft gelatinous-like and greenish-black. The mass is circumscribed and divided into irregular lobules, by firm fibrous strands. The gall bladder is dilated, bluish-black, with a smooth and glistening serosal surface. Its mucosal surface is deeply bile stained but smooth and velvety. The wall of the gall bladder is unthickened. The common duct is dilated throughout its length, measuring 1 cm in diameter. Dissection of the cystic, hepatic, and common ducts reveals no stricture, mass or stone. No stones are found in the gall bladder."

The histological report of all organs paralleled the gross findings. The liver was the only organ that showed pronounced tissue derangement. Again the pathologist's description is quoted verbatim.

"Sections taken from the body of the liver show complete obliteration of the normal architecture by bands of fibrous tissue. These fibrous trabeculae are diffusely infiltrated with chronic inflammatory cells and contain dilated bile ducts. Many of the liver cord cells are extensively vacuolated, while others are larger than normal, irregular in outline, and contain giant nuclei with coarsely granular chromatin. The appearance of these cells is of immature, regenerative cells, rather than of neoplastic cells. Throughout the liver there

are seen numerous fibrotic areas which contain one to several oval or circular structures, measuring about 120 micra in length and 75 micra in diameter. These structures have a clear peripheral zone and contain amorphous basophilic material. Their appearance is consistent with that of the ova of *Schistosoma japonica*. These ova are surrounded by acute and chronic inflammatory cells and epithelioid cells among which eosinophils are scarce.

A section of tissue taken from the center of the large mass described in the left lobe is composed of cells resembling liver cord cells arranged in irregular cords and acinar groups. There are abundant capillaries and many masses of yellow-green homogenous material consistent with inspissated bile. No bile canaliculi are seen in this tissue. The edge of this mass is formed most peripherally by a zone of chronic inflammatory material, and more centrally, by a dense band of hyalinized connective tissue. A few ova are embedded in the wall of the mass but none is found within it."

The definitive cause of death was listed as Portal Cirrhosis due to Schistosomiasis Japonica and, Hepatic adenoma, hepatic cell type, large, solitary.

In Retrospect

At the C.P.C. the case was discussed prior to the reading of the Autopsy Protocol. Of approximately 20 physicians in attendance the majority offered Portal Cirrhosis as the cause of death. Primary carcinoma of the liver was suggested by a few as occurring alone or superimposed upon a cirrhosis. The course of the disease was very typical of portal cirrhosis except for the hemoperitoneum and the transient episode of paralysis. The former strongly suggested malignancy while the latter suggested cardiovascular disease, such as, severe generalized arteriosclerosis.

Unlike most cases of cirrhosis this case had a definite etiologic factor, (and Detweiler in Cecil's Textbook of Medicine recognizes Schistosomiasis as a cause of portal cirrhosis). Throughout the course of hospitalization schistosomiasis was suggested. Stool and ascitic fluid examinations, though, were negative. The history, as mentioned, was scant and no mention was ever made that this patient lived anywhere outside of northern Luzon, which is not endemic for schistosomiasis. If it was known that he did live in either Samar or Leyte in his youth an energetic search through repeated stool examinations would not have revealed the ova. The autopsy showed the bowel to be grossly and microscopically free of parasites or ova.

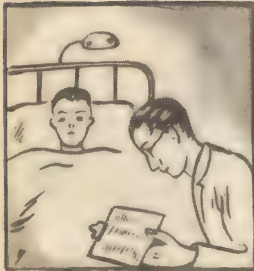
This case lends to the following remarks:

1. An infection of Schistosomiasis may, and does, lose its enteric manifestations with chronicity. Without reinfection the enteric phase of schistosomiasis can be completely eradicated. Negative stools indicate that this phase is absent.
2. Ova are not likely to be found in the ascitic fluid because fibrosis envelopes each ovum and secures it to the hepatic stroma. As long as the liver capsule is intact the ova cannot gain access to the abdominal cavity.
3. Ascites with hemoperitoneum does occur in portal cirrhosis despite the absence of malignancy, and probably occurs more frequently than is thought. (No explanation is offered for this transfer of red cells from the vascular channels to the peritoneum.)
4. It is believed that specific treatment for schistosomiasis would not have altered the clinical course, because the disease at this late date was portal cirrhosis and not schistosomiasis.
5. Portal Cirrhosis that occurs in or near endemic areas, or in cases exposed to endemic areas, such as service men or merchant seamen, a punch biopsy is recommended as a bona fide procedure in establishing a diagnosis. This case would have been diagnosed, beyond a question of doubt, if a punch biopsy was obtained. Agreed, that it would have been only of academic interest

the treatment would still be that of portal cirrhosis. (See 4 above)

6. Lastly, serological and skin tests, when available should be done on patients who have possibly had exposure to schistosomiasis and present hepatic disfunction.

XIII. Some Developments in Military Medicine - Presented by Colonel William S. Stone, Medical Corps, of the Research and Development Board, Office of The Surgeon General of the Army, at the 1948 annual meeting of the Massachusetts Medical Society in Boston, Massachusetts.



The international situation and its possible implications for the future are adequate cause for all of us to think in terms of national security. Accordingly, I have chosen to review for you some aspects of the Army Medical Department's plans and work in the fields of training and research, and their bearing on the future of professional medicine. The Medical Department of the Army has three broad training missions - they are:

1. The training of Medical Department personnel to render high quality professional care to the Army's routine load of sick and injured.
2. The development of staff, administrative and supply personnel to provide for administration, planning, supply and procurement functions required to run the Medical Department.
3. Military Medicine, which consists of those aspects of professional medical practice peculiar to war, or those whose development will be inadequate for medical practice in war.

The requirements for the first two categories, I believe, are obvious to all, but just what is included in Military Medicine and how are the needs in this field determined? This information has been obtained by analysis of manpower losses encountered in past wars; the conditions imposed on medical practice by armed conflict and study of new trends in weapons of war and their possible employment under varying conditions. For example, strategic aerial bombing will greatly modify medical practice for both the military and civilians involved. Specific indications of the problems involved are partially given in the strategic bombing surveys of Germany and Japan following World War II. They reveal that approximately 500,000 civilians were killed by aerial bombing of Germany with tremendous damage to all physical structures and a detrimental effect on disease control. The trend in ratio of death to injury because of aerial bombing reveals not only the effectiveness of this attack but also the fact that conditions were built up which caused not only a breakdown of the defense but also a failure in the medical service available for casualties. During 1940-41 the ratio of wounded to killed in the German army was 8 to 1. By 1943, this had shifted to 5 to 1, and during 1944 and 1945 the records revealed that for every three wounded one was killed. The military authorities attribute this shift entirely to the devastating effect of aerial warfare. It must be remembered that in a great number of instances many were officially reported as missing who actually had been killed (destroyed or buried) by aerial bombardment. Undoubtedly these shifts also prevailed for civilian populations but less accurate figures are available for this category.

In Japan where the atom bomb was used, 70,000 to 90,000 were killed and 100,000 were injured at Hiroshima while at Nagasaki it is estimated that 34,000 were killed and 60,000 injured. Pictures of physical damage caused by these types of warfare readily convey to medical men the magnitude of health and injury problems involved.

1. Losses due to physical or mental defects prior to service

in armed forces. Analysis of U. S. Army manpower losses shows that in World War II, with over 14 million Class 1A draftees called by Selective Services, 4,828,000 were rejected for physical or mental defects. This is a rejection rate of approximately 33%, a very significant figure to be remembered when calculating available manpower.

SELECTIVE SERVICE

Class 1A draftees called	14,484,000	
Rejected for physical or mental defects	4,828,000	(33%)
Rejects for mental disease	856,200	(18%)
Rejects for mental disease, deficiency or illiteracy	1,532,500	(32%)

This rejection rate of 33% is a serious manpower loss from the military viewpoint and every effort is being made by job analysis and proper manpower classification to reduce its magnitude without significantly affecting the quality and usefulness of personnel in the Army.

Other principal causes of manpower loss to the Army were:

2. Battle casualties - During the last war wounded, died of wounds, killed in action and prisoners of war were responsible for only approximately 1/3 of the permanent losses of effectiveness that occurred, the remainder being largely due to sickness and injury.

January 1, 1942 - August 31, 1945

Killed in Action	169,000
Died of Wounds	26,300
Declared Dead	<u>12,300</u>
Deaths Disease	13,800
Deaths Injury	<u>50,100</u>
Total Non-Battle Deaths	63,900
Total Battle Deaths	207,600
PW & Internees	<u>125,890</u>
Losses due to KIA or W plus PWS	333,490
CDD for Disability exclusive of Battle Injury	925,000
Total permanent losses other than battle	988,900

MANPOWER LOSSES OTHER THAN KIA* OR MIA** DURING PERIOD 1942 - 1945

Total separated from service	1,312,000
Separation on CDD's	965,000
Separation for inaptness or related causes	356,000

Separations on CDD's because
of battle or nonbattle injury 90,087 (9.4%)

Principal losses due to disease:

Psychoneurosis	256,135
Musculoskeletal (mostly low back pain)	60,999
Eye, ear, nose and throat	58,715
Psychosis	54,523
Gastric and duodenal ulcer	50,861
Respiratory, other than tbc	50,291
Defective and painful feet	37,380
Arthritis	43,354
Neurological	33,498

* KIA - Killed in Action

**MIA - Missing in Action

4. Major U. S. Army cause of hospitalization due to disease.

To complete the picture of loss of manpower, we should see what disease conditions were the cause of major losses of time due to hospitalization:

SELECTED CATEGORIES DISEASE CASES U. S. ARMY 1942 - 1945 INCLUSIVE

	TOTAL CASES	AVERAGE CASES PER YEAR
Encephalitis	508	127
Filariasis	4,036	1,009
Leishmaniasis	346	86
Poliomyelitis	1,326	331
Schistosomiasis	1,636	409
Coccidioidomycosis	2,894	723
Malaria	462,060	115,414
Acute Respiratory Disease including Influenza	4,081,533	1,021,883
Diarrhea and dysentery	523,211	130,802
Infectious Hepatitis	171,691	42,922
Venereal disease	1,071,429	267,857
	1944	1945
Amoebiasis	7,303	26,998

It is apparent that acute respiratory diseases, diarrhea and dysentery, malaria and infectious hepatitis (jaundice) were the major problems, while bizarre diseases like schistosomiasis, poliomyelitis, leishmaniasis, filariasis, and encephalitis were of minor importance. Venereal diseases were also of major military importance. During the period of 1942 - 1945 inclusive, there were 1,071,429 cases of venereal disease in the U. S. Army. Developments in the treatment of venereal diseases reduced the average time lost from 48 days per case in 1939 to 4.5 days per case in 1947. However, in spite of educational efforts and better prophylaxis no such favorable record has been obtained in the prevention of venereal diseases. The prevention of venereal disease involves moral, social and other issues and can not be controlled entirely from the medical approach. However, through cooperation with other agencies involved, progress is being made in this field.

In addition to manpower losses previously experienced, we have to anticipate new problems that may be important in the future, such as: disaster relief in connection with aerial bombing; cold casualties; epidemic disease in the presence of great physical damage to the country and disorganization of health services; radiation casualties from atomic fission products; inadequate nutrition and shortage of medical personnel, facilities, equipment and

supplies. These considerations and those cited above make it obvious that the health and welfare of both the civilian and military populations of the U. S. will be intimately related during any future war. Some of the problems involved can be taken care of by civilian defence preparations, but many of them will have to be solved by the medical services of the armed forces or combined armed force civilian action. At the present time, I believe the known major military medical problems are:

MEDICAL MILITARY PROBLEMS

1. Physical and mental standards for most efficient use of manpower.
2. The prevention and care of casualties due to or complicated by radiation injury due to nuclear fission products.
3. Living and working under conditions of extreme cold.
4. The prevention of cold casualties.
5. The evacuation and medical and surgical care of sick and injured under conditions of extreme cold.
6. Preventive medicine and medical practice in disaster relief.
7. Traumatic surgery, including first aid, resuscitation, operative and post-operative care, and rehabilitation as it applies in war and in disaster relief.
8. Preventive psychiatric and psychological problems required for prevention of psychiatric casualties in war.
9. Control of infectious and parasitic diseases, as required with troops, civilian populations and refugees in war.
10. Nutrition problems of the severely injured and infected.
11. Nutrition problems in handling displaced persons who have undergone starvation, or where inadequate food is available to meet average requirements.

In addition to the line of action indicated by the above, I believe we are justified in concluding that, contrary to World War II experience, if we are involved in another war there will be great damage to our major population centers at home. Further, that little time will be available for professional medical training or the development of new information once war starts. Therefore, required research, training and effective organization between civilian and armed force medical services will have to be accomplished prior to war.

The Armed Forces are trying to anticipate these national requirements and undertake, as a result of analysis of previous experience and future needs, research on problems where inadequate information is available. When obtained, this information must be introduced into all undergraduates and postgraduate medical teaching so that all medical personnel (civil and military) are fully informed on available information and trained in medical measures required in war and for disaster relief. For example, when the undergraduate, intern or resident is studying thermal burns or fractures, he should include in his studies those aspects of the problems that would occur in war and in major disasters. Aside from technical matters, consideration should be given to such problems as thinking in terms of not only the individual case but of several hundred or thousands that may be awaiting treatment. Further, that resuscitation preparation, treatment and aftercare will probably be handicapped by primitive facilities and possibly inadequate personnel, supplies and equipment.

I believe it is evident that military medical information, training and procedures required for this type of situation are needed in all fields of medical practice. The Armed Forces are attempting to supply these needs. Evaluations of World War II experience in specific fields will soon be available for inclusion in medical teaching. Research work conducted in service installations and in the field will supplement existing information available.

National Defense contractors working in civilian institutions are adding much basic information on specific problems. These medical research efforts are being coordinated by the National Research Council insofar as civilian military relationships are concerned, and by the Research and Development Board of the National Defense Establishment for the Armed Forces.

In the future, professional training in civilian medical services and that of the Armed Forces must be carefully coordinated and in constant working harmony. The Armed Forces medical programs and those of civilian medicine must contribute much to give all medical personnel the knowledge and technique required for future medical practice. Initial steps are being taken to accomplish these objectives. Much needs to be done by all concerned - the Armed Forces to develop special information, techniques, methods and materials required for medical practice in war -- civilian medicine to see that the results of this work are a part of every doctor's training prior to the need for it in war.

PART III - STATISTICAL

Evacuation

During the period 29 May to 25 June 1948, the following number of patients were evacuated from the several major commands:

Evacuations of military personnel per 1,000 strength for the period 29 May to 25 June 1948 were as follows:

	<u>AIR</u>	<u>WATER</u>	<u>TOTAL</u>		
JAPAN	105*	51*	156*	JAPAN	2.0*
KOREA	49**	0	49**	KOREA	1.4
MARBO	29	6	35	MARBO	1.5
PHILRYCOM	35	12	47	PHILRYCOM	1.1
				THEATER	1.6

* Includes air evacuees from Korea

** Patients evacuated to Japan for onward Evac.

Hospitalization

1. The Bed Status Report as of 25 June 1948 was as follows:

	<u>Total T/O</u> <u>Beds Auth.</u>	<u>Total T/O</u> <u>Beds Establ.</u>	<u>Total T/O</u> <u>Beds Occupd.</u>	<u>% Auth.</u> <u>T/O Beds Occupd.</u>	<u>% of Establ.</u> <u>Beds Occupd.</u>
JAPAN	4,450	4,466	1,980	44	44
KOREA	2,050	1,149	874	33	59
MARBO	825	459	285	35	62
PHILRYCOM	2,350	2,275	1,137	48	50
THEATER	9,675	8,349	4,076	42	49

2. Admission rates per 1,000 troops per annum for the 4-week period ending 25 June 1948 were as follows:

	<u>THEATER</u>	<u>JAPAN</u>	<u>KOREA</u>	<u>MARBO</u>	<u>PHILRYCOM</u>
All causes	550	672	627	258	416
Disease	493	604	569	220	374
Injury	56	68	59	38	42
Psychiatric	16	17	31	13	4.8
Rheumatic Fever	.64	.65	1.8	0	0
Common Respiratory Disease	60	82	71	20	33
Influenza	.86	1.3	0	0	1.2
Primary Atypical Pneumonia	3.1	1.1	6.6	4.5	3.0
Common Diarrhea	11	2.4	32	6.8	13
Bacillary Dysentery	.71	.49	0	0	2.1
Amebic Dysentery	2.6	.16	2.9	1.1	7.8
Malaria	7.4	.81	15	0	17
Infectious Hepatitis	3.6	4.7	2.6	1.1	3.6
Mycotic Dermatoses	8.7	9.1	21	0	2.1
Venereal Disease	85	116	99	19	52

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The editor of the Surgeon's Circular Letter extends an invitation to all personnel of the Medical Department to prepare and forward, with a view to publication, articles of professional or administrative nature. It is assumed that editorial privilege is granted in reviewing the copy submitted for publication. Authors are urged to keep their papers brief. Articles should be forwarded so as to reach the Medical Section, GHQ, FEC, not later than the 20th of the month preceding the publishing of the Circular in which it is desired.

